## SOUTH DELTA WATER AGENCY

3-17-17 SWRCB Clerk

4255 PACIFIC AVENUE, SUITE 2 STOCKTON, CALIFORNIA 95207 TELEPHONE (209) 956-0150 FAX (209) 956-0154 E-MAIL Jherrlaw@aol.com

Directors:

Jerry Robinson, Chairman Robert K. Ferguson, Vice-Chairman Natalino Bacchetti Jack Alvarez Mary Hildebrand

Counsel & Manager: John Herrick

March 17, 2017

Via E-Mail commentletters@waterboards.ca.gov

Mr. Jeanine Townsend, Clerk to the Board State Water Resources Control Board 1001 I Street, 24th Floor Sacramento, CA 95814-0100

Re Comment Letter - 2016 Bay-Delta Plan Amendment & SED

Dear Ms. Townsend:

The draft Substitute Environmental Document ("SED") is legally and scientifically deficient and should not be adopted by the State Water Resources Control Board ("SWRCB"). Among other things, the SED proposes relaxing the agricultural beneficial use objectives in the southern Delta (from the current 0.7/1.0 EC to 1.0 EC all year), while at the same time purporting to maintain the existing water quality which regularly exceeded those objectives. Assuming that the relaxation of water quality standards in the collapsing Sacramento-San Joaquin Delta estuary could even be contemplated, such relaxation would have to based upon evidence that the resulting water quality is reasonably protective of the beneficial use or uses dependant on that water. No such evidence exists. To be clear, the SWRCB is not facing a choice between two conflicting scientific opinions, sets of data, or conclusions. There is only one set of data relating to agricultural salt tolerances in the southern Delta and that data indicates the current water quality conditions in the area are not protective. The contrary "data" on which the SED and SWRCB staff rely is demonstratively incorrect.

### INTRODUCTION

In its most basic terms, the SED concludes that calculations and modeling show adequate leaching of salts is occurring in the southern Delta and because of that, allowing a worse water quality to exist than the current objectives permit will still protect agricultural beneficial uses. The logic used by the SWRCB staff to support the SED can be described as a simple syllogism; "if A then B; if B then C; if A then C." "A" is the data of salts applied and salts leaving the crop

SWRCB March 17, 2017 Page - 2 -

root zones. "B" is what leaching fractions derive from the "A" data. "C" is the reasonable water quality objective based on the leaching fractions. In the abstract such reasoning is perfectly appropriate. In practice, the SED uses "X" (the wrong salt data) as if it were "A." Since it is not we thus we end up with "if A then B; if B then C, if X then C." Of course such substitution of one of the premises destroys the logic.

SED asserts that the violations of water quality objectives that occurred in the past (when the current objectives were not met and not enforced) did not adversely affect agriculture in the southern Delta. The SED then proposes to implement the relaxed objectives in a manner that will keep the water quality similar to the historic levels so that the proposed relaxation does not in fact "change" anything.

In support of the relaxation, the SWRCB's staff used an analysis which calculated leaching fraction in the southern Delta, and from that calculated what water quality is protective of agriculture in the area. The faulty analysis used a "salt in" and "salt out" calculation to determine leaching fractions. The applied water was the "salt in" portion. Unfortunately for the SWRCB staff and the SED, the analysis used water qualities inputs which were not based on actual water quality, but on an *assumed* water quality which matched the objectives. This assumption of course ignored the well known, ongoing and regular exceedences/violations of the objectives. If the water being applied to agricultural lands in the southern Delta had been of a quality matching the objective the analysis *might* have had merit. Since it did not, the analysis simply doesn't apply to the subject circumstances or area.

The analysis makes the further mistake of using the wrong "salt out" numbers so that all of its conclusions are necessarily wrong

In addition, the SED failed to "check" its conclusions to see if there was any data indicating how or if any particular quality of water would adversely affect agriculture. If it had, it would have found that data produced by the Delta Protection Commission indicates that increasing applied water salinity in the Delta forces farmers to change cropping and results in decreased yields; conclusions directly at odds with the SED. These and other issues are more fully described below.

### **BACKGROUND**

A historical overview of the issues and problems is found in the 1980 Report on the Effects of the CVP Upon the Southern Delta Water Supply on the Sacramento-San Joaquin Delta, California ("Report") produced by the USBR and the SDWA. Figure VI-25 from that Report (the entire Report is included herewith) shows that the (calculated) mean monthly average TDS at Vernalis for the decades of the 1930's and 1940's was below 400 TDS even during the

The Report references one of the authors as the "Water and Power Resources Services;" a name by which the USBR was known for a short time.

SWRCB March 17, 2017 Page - 3 -

summer (highest salinity) months. 400 TDS converts to an EC of 256. The Figure also shows the TDS for the decades of the 1950's and 1960's with those mean monthly values reaching 450 and 600 TDS, respectively. Even at the 1960's level, the EC on average did not exceed an EC of 384. The SED proposes to relax the objective to 1000 EC; just under a threefold increase from the water quality present in the 1960's after decades of deteriorating water quality.

The reason for the every decreasing water quality in the San Joaquin River is of course the importation of huge quantities of salt into the basin each year by the CVP, and the subsequent movement of much of that salt into the river as surface or subsurface drainage. As the Central Valley Regional Water Quality Control Board showed in its 2006 report Salinity in the Central Valley (attached), the San Joaquin River contributes 742,000 tons of salt (mean) to the Delta annually and that number exceeds a million tons per year sometimes.

This huge amount of salt is of even greater concern because the CVP decreased river flows by 553,000 acre feet per year (345,000 acre feet April – September) (see Report Table V-18). The decreased flows resulted in greater concentration of the added salts. To date, neither the SWRCB nor the Regional Board have required the USBR to mitigate it adverse effects on the river.

In 1995 the SWRCB adopted an updated Water Quality Control Plan for the San Francisco/Bay Sacramento-San Joaquin Delta Estuary which set the southern Delta Agricultural Beneficial Use Objectives at 700 EC (April-August) and 1000 EC (September-March). That Plan specified compliance be achieved by December 31, 1997. The implementation of that Plan occurred in 2000 with the adoption of the Revised Water Rights Decision D-1641. However, D-1641 further delayed implementation of the objectives (until April 1, 2005) and in a footnote allowed the objectives to relax to a year round 1000 EC if DWR and USBR implemented a barrier program "or equivalent measures." This potential relaxation constituted a change in the objectives.

D-1641 was challenged by nearly all involved parties *except* DWR and USBR. The eventual final ruling by the appellate court, among other things, concluded that the water quality objectives could not be changed via a water rights decision and so directed the SWRCB to either fully implement the southern Delta salinity objectives or change them in the proper water quality planning process. Unfortunately for southern Delta interests, the SWRCB then proceeded as if the appellate court had ordered it to change the objectives, ignoring the choice of simply implementing the objectives. This decision by the SWRCB was not supported by any evidence in the 1995 Plan process of the D-1641 process; no evidence was submitted that suggested the southern Delta salinity objectives were someone overly protective.

Thereafter, DWR and USBR informed the SWRCB that they would not meet the objectives by the April 2005 deadline which resulted in two consecutive Cease and Desist hearings and Orders. Those order WR 2006-0006 and WR 2010-0002 extended the deadline by which DWR and USBR were to meet the objectives, or more correctly to submit a plan by which

SWRCB March 17, 2017 Page - 4 -

they would "obviate" the threats of future exceedences. The final deadline for such plan (January 2013) came and went without compliance with the CDO's. DWR, USBR and SWRCB apparently assuming they would relax the standards before enforcement would be necessary. Eventually, the SWRCB Watermaster issued a ruling that gives DWR and USBR an additional 180 days (expiring June 2017) to submit the plan of compliance.

Thus, the history of the southern Delta water quality objectives for the protection of agricultural beneficial uses is one of delay and lack of enforcement. The incidences of violations are too numerous to relate here, but the SWRCB records of DWR/USBR notifications of exceedences since 2005 are incorporated herein. With that background we will now examine in more detail the analysis done in support of the SED.

## **HOFFMAN REPORT**

The basis for the proposed changes to the southern Delta water quality objectives is the January 2010 report by Dr. Glenn Hoffman, Salt Tolerances of Crops in the Southern Sacramento-San Joaquin Delta ("Hoffman Report"). As related in the Hoffman Report, impacts to crops are estimated to occur when the EC of the soil reaches a threshold for any particular crop. In addition, individual applications of high saline water can also adversely affect plants and crops even when the soil EC threshold is not reached. The Hoffman Report uses no current data, relies on no actual sampling and testing of soils, and contains no actual data on existing conditions in the southern Delta. Because of this, both Dr. Hoffman and the single peer reviewer of Dr. Hoffman's work state that additional sampling and testing were desirable.

There are two ways to determine if salts are building up in the root zone of agricultural crops. One is to actually *measure* the salts in the soil and the other is to *calculate* the soil salt and how it might be changing. The calculation method attempts to determine the leaching fraction of a particular area. The "leaching fraction" is the amount of additional applied water (of a certain quality) above the amount needed/used by the plant and which passes through (out of) the root zone. Leaching fractions are normally expressed as a percentage. This amount or percentage of "extra" water is the means by which salts move out of the root zone.

In order to calculate leaching fractions for the southern Delta, Dr. Hoffman used a specified water quality for the applied water and 1986, 1987 and 1989 data from the sampling of tile drains (see Table 3.10 of Hoffman Report). In nonscientific language, Dr. Hoffman used applied water EC as the "salt in" to the soil, and tile drainage EC as the "salt out" of the soil.<sup>2</sup>

Dr. Hoffman assumed the applied water quality was 0.7 dS/m EC (to be consistent herein I will use convert from the dS/m scale to the mS/m scale, in this instance converting 0.7 to 700).

<sup>&</sup>lt;sup>2</sup> Dr. Hoffman also references some other drainage and tile drainage data but again never confirms if the water in that drainage was from poor quality ground water, excess applied water, or some combination thereof.

SWRCB March 17, 2017 Page - 5 -

There is no basis for such an assumption. Data from DWR indicates that the EC at the three interior southern Delta compliance locations is regularly above the 700 EC levels in summer months (see for example attached DWR Water Quality Data). Dr. Hoffman made no attempt to determine what the range of EC's were in any particular year or in any year types. Neither did Dr. Hoffman or SWRCB staff seek data from individual farmers who regularly take EC measurements. Attached hereto is a declaration I prepared and signed giving one example of such local testing. In June of 2015 I sampled the supply water from the southeastern end of Tom Paine slough as 2,200 EC. Thus, when Dr. Hoffman assumed the "salt in" as being 700 EC he was not using actual or accurate data; he was simply guessing.

For the "salt out" inputs, Dr. Hoffman used the tile drain data referenced above. However, to be useful, the tile drain water (which was originally sampled and the EC thereof measured), would have to be the excess applied water which passed through the root zone which transported the applied salts through the soil. Instead, those tile drains (described in pages 51-53 of the Hoffman Report) contain mostly shallow ground water and not excess applied water. The ground water in that area is very saline (see attached Statement of Jack Alvarez). Thus, Dr. Hoffman's data for how much salt is being passed through the soil profile is simply not that.

Therefore, Dr. Hoffman used the incorrect salt in data (understating applied salt) and incorrect salt out data (overstating salts leached from the soil). The results therefore may indeed be calculation outputs or modeling results, but they bear no relationship to what was/is happening to salt levels in southern Delta agricultural soils. Not only can one *not* calculate an accurate leaching fraction by using incorrect and irrelevant data, but one also cannot thereafter estimate what quality of water is necessary to protect agricultural beneficial uses. Once the initial, incorrect data was used, Dr. Hoffman's entire effort and certainly his results are merely some hypothetical math exercise and useless in evaluating southern Delta salinity issues.

The only effort made to address this fundamental fault in the work was when Dr. Hoffman added another, lower leaching fraction (15%) to his work; and still concluded that the objectives could be relaxed. Of course such a "correction" does not cure the underlying problem unless this new leaching fraction he later inserted was indeed an accurate representation of leaching fractions for southern Delta soils. As one might assume, it was not as will be explained below.

The Hoffman Report suffers from other inaccuracies and misconceptions which also preclude its use to justify a relaxation of water quality standards. Water and the dissolved salts in it must pass through the soil in order to leach salts from the soil (or prevent their buildup). However, as previously presented to SWRCB staff and Dr. Hoffman, the permeabilities/percolation rates of southern Delta soils inhibit, if not actually prevent the water from moving fast enough to accomplish any leaching (see attached Water Quality Considerations for the South Delta Water Agency, Hoffman, Prichard and Meyer). Also attached hereto is the Outline of Testimony of Alexander Hildebrand on South Delta Agriculture by Alex Hildebrand explaining this problem with many southern Delta soils. Mr. Hildebrand relates how slow

SWRCB March 17, 2017 Page - 6 -

percolation rates can prevent a farmer from applying the necessary additional water to leach the soil because the field must be allowed to dry out before the next irrigation is necessary. Because of this, the farmer ends up adding more and more salt over the season and the crop suffers.

Though perhaps not a controlling fact, Dr. Hoffman's familiarity with the underlying issues associated with farming perhaps helps explain why his work is not reliable. At a workshop early in this process, Mr. Hildebrand explained publically to Dr. Hoffman that he was not considering real-life problems in his analysis. Mr. Hildebrand explained how the management practices for alfalfa included mowing, raking and baling upwards of 8 times a season and how this regular vehicle traffic over the fields further compact the soils and exacerbates the low permeability problems. Dr. Hoffman's now semi-infamous reply was that he "could help it if farmers had bad management practices." Of course such a comment lays bare the technical shortcomings of the process and also how difficult it is to get "experts" to change their mind even in light of irrefutable evidence. Alfalfa cannot be farmed without vehicle traffic for mowing, raking and baling.

This example also recommends a change to the entire process. Since the first agricultural objectives were developed for the Delta, the SWRCB and most interested parties have focused on measuring impacts to "salt-sensitive" crops. Thus the current SED as well as the many prior efforts all look to how applied water quality might affect beans, a salt sensitive crop. This perhaps makes sense in the lab where plant scientists pour water into containers of sand to see how much water passes through the soil and the degree to which salt may accumulate in the soil. However, the real world is something different altogether.

The degree to which any plant may be sensitive to salt may not be the most important concern in developing a water quality objective. If the soils do not allow adequate leaching, then the salt delivered via the applied water never gets fully flushed out of the root zone and eventually that plant's particular threshold is reached and the crop suffers. Of course for any particular crop the time it takes to reach the threshold may differ, but the issue is not so much how sensitive the plant is, its whether or not salts are being flushed out of the soil. Dr. Hoffman's fundamental error was thinking that he could calculate the leaching fractions of the soil and that his calculations need not be ground-truthed. One cannot know if a soil is allowing enough water to pass through to allow leaching without measuring what is actually going on in that particular area. Modeling leaching is at best a guess, and in this case a very bad one.

Lastly with regard to the Hoffman Report it must be noted that in his attempts to use tile drain data, Dr. Hoffman failed to investigate (or understand) the many differences in the southern Delta. The southern Delta has land that is 20 feet above sea level and land that is 5 feet below sea level. Some of the lands get water from near Vernalis which is generally kept at or below the objective; some get water from interior areas that are stagnant and higher in salinity (than the water at Vernalis), some get export quality water either from the cross Delta flow or directly from the CVP's Delta Mendota Canal; and everything in between. Many areas have shallow ground water of very poor quality and the plants roots are in contact with that poor quality water. In

SWRCB March 17, 2017 Page - 7 -

some areas the tides directly affect ground water levels and thus twice daily raise the poor quality ground water up and down, in and out of the root zone. This inhibits if not prevents salts from permanently passing through the root zone. A myriad of differences determines the ability or success at leaching.

Though some of these peculiarities were mentioned by Dr. Hoffman, none were actually taken into account in his work. For example, the notion that tile drains in the southeastern portion of the area are typical of drainage in other southern Delta areas is false on its face. Those drains are in soils and area that have little in common with other areas. Thus even if the tile drain data were correct (and it is irrefutably incorrect) it still would still not be reflective of drainage from other areas or indicate how much salts passes through other root zones. In this same vein, Dr. Hoffman did not determine if the supply water for the lands served by the tile drains was from the Delta channels of from the DMC. Such lack of "ground-truthing" cannot support changes to water quality objectives.

As we see, the Hoffman Report simply cannot support changes to water quality objectives. The only evidence bearing on the issue of "what quality of water is necessary to reasonably protect agricultural beneficial uses" was in fact produced by the SDWA.

## LEINFELDER-MILES REPORT

In response to Dr. Hoffman's inaccurate Report and to the SWRCB staff's unwillingness to recognize the deficiencies therein, SDWA, in conjunction with grant funds from UC Davis retained Michele Leinfelder Miles to conduct a study. The study is entitled *Leaching Fractions Achieved in South Delta Soils Under Alfalfa Culture Project, Report Updated December 2016* and is attached hereto. Ms. Leinfelder-Miles is the Delta Resource Management Advisor with the University of California Cooperative Extension, based in San Joaquin County. Seven locations were selected throughout the southern Delta to get a sampling of different soil types and different water qualities. The basic design of the study was to sample and measure the soil salinity in the root zone at the beginning of the irrigation season, sample the applied water used for each irrigation and measure its salinity, and then sample and measure the soil salinity at the end of the season. In this manner, the study would determine the amounts of salts applied and how much of those did or did not remain in the root zone (were or were not leached out).

The data was collected in the years 2013 and 2014 and the results are in the attached study and were presented to the SWRCB orally at its December 2016 workshop/meeting held in Stockton California. The oral and written materials at that workshop/meeting are incorporated into these comments. In general, Ms. Leinfelder-Miles' study found that of the seven locations, five never achieved a leaching fraction greater than 8% and of the 14 results (seven sites over two years) half had leaching fractions at or less than 5% with results of 3% and 2% in certain cases. Recall that Dr. Hoffman calculated leaching fraction for the southern Delta at 20% and above and added a 15% leaching fraction analysis after the initial criticisms to his work.

SWRCB March 17, 2017 Page - 8 -

The conclusions reached by Ms. Leinfelder-Miles were (i) salinity in the area is a problem because of the low permeability of the local soils, poor quality applied water and shallow groundwater, (ii) the data indicates that leaching fractions being achieved are very low such that salts are building up in the soils, potentially harming crops, and (iii) local conditions and best management practices constrain farmers ability to leach salts.

Thus one the one hand, the SWRCB has before it calculated leaching fractions by Dr. Hoffman which were arrived at using incorrect and irrelevant data. On the other hand the SWRCB has Ms. Leinfelder-Miles' study which actually determined leaching fractions based on specific, current data. That data shows very low leaching fractions and a buildup of salts in the soil. As stated above, the question before the SWRCB does not hinge on a choice between two sets of data or two opposing opinions. The only accurate, reasonable and reliable data that exists does not support a relaxation of the water quality objectives. To the contrary it suggests current standards are insufficient. That conclusion is perhaps premature in that we do not generally know if the current objectives are protective because DWR and USBR do not regularly meet the standards and the SWRCB does not enforce the standards. Regardless, there is no data supporting a relaxation of the water quality objectives for agricultural beneficial uses in the southern Delta.

## **CURRENT HARM DUE TO POOR WATER QUALITY**

The SED fails to include any data or reference any effort regarding to secure such data on the impacts of current water quality on crop production or costs associated with the use of high salinity applied water. It is important to note that this process began nearly ten years ago. Even before that, SDWA put on evidence at the two CDO hearings referenced above indicating ongoing crop damage due to salts in the applied water. Included herewith are copies of the testimony of Mark Bacchetti, Rudi Mussi and Chip Salmon; all local growers who have presented evidence and conclusions regarding how the water they use for irrigation in the southern Delta adversely affects their crop production and or requires additional costs for them because they can only use that water.

In addition, also included herewith are the Statements of Richard Marchini, Mark Bacchetti (again), and Jack Alvarez, also local growers indicating that they observe plant and crop damage due to salt and/or how this salt adversely impacts crop yields.

The testimonies and statements are easy reads and I encourage each Board member to read each one. As the policy and decision makers in this process, the Board can of course decide to disregard these testimonies and statements if they believe they are unreliable or somehow inaccurate. However it must be recognized that there is no contrary evidence; no party, no farmer, no study suggests that yields and plants are unaffected by current water quality conditions. Hence there is nothing to balance against this information; nothing that presents a conflict in data or science or opinion. The only information which could be construed as presenting contrary data was given many years ago. It was simply statements that there were

SWRCB March 17, 2017 Page - 9 -

fewer acres of beans now in the area. Of course crops change over time as market and other forces guide farmers' decision, but the current acreage of one crop is simply not evidence of what water quality reasonably protects local agriculture.

There is however other, official evidence contradicting the SED recommendations to relax the water quality objectives. The Delta Protection Commission retained Dr. Jeff Michael to produce the Delta Economical Sustainability Plan, completed and adopted in January 19, 2012. That Plan showed that even small changes in salinity significant decreases in agricultural revenues, just from changes in crop choices by farmers as they adjust to adverse situations. The Plan also calculated decreases in crop production resulting from small incremental increases of applied water (at 5% leaching fractions). These results were echoed in the BDCP Statewide Economic Impact Report. Both are referred to by Dr. Michael in his testimony given in the WaterFix hearings late last year, which testimony is attached hereto. We also include by reference the DPC Economic Sustainability Plan.

## SED CHANGES TO COMPLIANCE MONITORING

When the 1995 WQCP was first developed, there was some uncertainty as to where compliance with the standard should be measured. The ultimate decision was that there would be three interior southern Delta compliance locations, at Brandt Bridge on the San Joaquin River, Old River at Middle River, and Old River at Tracy Blvd. Bridge. At the time, the involved parties assumed that if these locations were later determined to not be representative of the water quality conditions in the area, different locations would be found.

Instead of evaluating what the proper compliance locations should be, the SED now proposes to average (though the specifics are lacking) three *reaches* of Delta channels to determine compliance. Those reaches are generally Vernalis to Brandt Bridge, Old River and Grant Line Canal, and Middle River fro Old River to Victoria Canal. This approach raises serious questions given that the 2006 WQCP clarified that water quality objectives, like those in the southern Delta *apply throughout the channels* even though they are measured at discrete locations.

If one averages a number of water quality measurements, the resulting number informs regulators very little about local conditions; obviously an average hides the extremes. Take for example the Old River channel proposed as one of the compliance reaches. At the upper end the water quality is "typically" 7-800 EC during summer, at Tracy Blvd. Bridge the EC can be 1000-1200 EC, a mile downstream the EC might be 1500, and at the end of the reach the EC would be 3-500 (the end of this reach would be sampling export water). Averaging all of these (700, 1000, 1500, 400) results in 900. If however we only average three of these (700, 1000, 400) we get 700. Which of these is the accurate representation of water quality in Old River? Which shows us the trouble spot near the Tracy Blvd. Bridge?

The problem appears even more serious. Clearly, relaxing the objectives to 1000 EC all

SWRCB March 17, 2017 Page - 10 -

year (and requiring Vernalis to meet 700 EC as part of the implementation plan) will still result in violations of the 1000 EC given that the Tracy Blvd. Bridge compliance location is often above this 1000 EC threshold. If one were hesitant to relax the objectives too much but still didn't want to have to enforce compliance, one could not come up with a better way of avoiding future exceedences; simply average the worst water quality away. One can never know the underlying reason for this averaging proposal in the SED, but clearly it would hide problem areas in the southern Delta and would not be in compliance with the mandate in the 2006 WQCP that standards apply throughout the channels.

SDWA strongly opposes this averaging proposal and submits there is no logic or reasoning supporting it. We are all aware there are problem areas in the southern Delta and the "fix" to them remains elusive. We can also examine where better compliance locations might be situated and discuss why or if some future party might be responsible for compliance at such locations. We cannot however tolerate a proposal which will necessarily hide each and every future violation of the objectives in order that the SWRCB not be placed in the uncomfortable situation of having to enforce the rules.

## THE SED IGNORES CONTROLLING LAW

SDWA incorporates the comments submitted by Central Delta Water Agency regarding issues related to this topic. In addition, we note that Water Code Sections 12200 et. seq. mandate that the projects provide an adequate supply of good quality water to all in-Delta users. Unless and until that is done, the statutes preclude the export of water from the Delta. The SWRCB as the agency which permits the export of water by DWR and USBR must first require the projects enter into contracts with Delta agencies to fulfill the mandates of Sections 12200 et. seq. To date, DWR and USBR refuse to negotiate with SDWA for such a contract. Unless and until such contracts are executed or the provision of such water otherwise accomplished, the SWRCB should not prejudge the issue by relaxing the objectives and transferring the burden of poor water quality onto the senior right holders in the Delta.

Similarly, unless and until the SWRCB determines the effects the projects have on fisheries, it cannot require other and senior right holders to provide water for the protection and recovery of fish species due to project impacts. The SED is shifting the burden of project mitigation onto water right holders on the tributaries without having determine the responsibility if any they might have for such mitigation.

# THE SED INAPPROPRIATELY PIECE-MEALS THE PROCESS AND THE CEQA REVIEW

The SED is the first part of the Bay-Delta process and deals only with southern Delta salinity issues and fishery flows as measured at Vernalis. Thus, the analysis ignores the other Delta related objectives regardless of whether or not they affect the salinity issues or the fishery flows; and vice-versa. For example, the fishery flows are meant to assist in- and out-migrating

SWRCB March 17, 2017 Page - 11 -

salmon move through the Delta. However, the flows are only measured at Vernalis and do not insure the fish get past the export pumps and either out to the ocean or up the rivers. By deferring the export issue until later, the SWRCB prejudges that flows, and not exports are the problem needing to be addressed. The fishery flows needed to protect the fisheries may be less if exports are not allowed or decreased during certain times. If the specified flows are adopted as needed for fish then there can be no exports of that flow. Deferring the export decision is contrary to the determination of what flows are needed.

In addition, CEQA does not allow the piece-mealing of a project such that the environmental review only examines portions of the project and not the whole. The Bay-Delta process does just that by breaking the development and analysis of the eventual plan into distinct portions.

### **CONCLUSION**

SDWA asserts that there is no basis for relaxing the water quality objectives for the protection of agricultural beneficial uses in the southern Delta. The "evidence" of the suggest relaxation falls apart on examination and the only reliable evidence before the Board indicates that under current conditions salts are accumulating in the soils of the south Delta. The SED appears to be deficient in numerous ways and the SWRCB should withdraw the document and begin again by first applying the appropriate laws, especially the requirement that USBR and DWR fully mitigate their adverse impacts to third parties and the environment. SDWA hereby fully incorporates the comments of San Joaquin County, and the comments of CalSPA to the extent they apply to salinity issues and do not conflict herein. Central Delta Water Agency joins in these comments.

Very truly yours,

JOHN HERRICK, ESQ.